### Smoking During Pregnancy

California Department of Health Services Tobacco Control Section http://www.dhs.ca.gov/tobacco

Cigarette smoking during pregnancy is an important public health problem. It hurts pregnant women's health, causes pregnancy complications, increases the risk of health problems in newborns, and leads to negative consequences for child health and development. Smoking during pregnancy increases the risk of low birth weight, intrauterine growth retardation, stillbirth, and preterm delivery.1 Smoking is also associated with high risk of placenta previa, placental abruption, and premature rupture of membranes.<sup>2</sup> If all pregnant women in the United States quit smoking, there would be an estimated 11 percent reduction in stillbirths and a 5 percent reduction in newborn deaths.<sup>2</sup> Smoking attributable neonatal expenditures were \$367 million in the United States and \$34 million in California in 1996.3

Smoking prevalence during pregnancy is usually higher among women who are younger, white, less educated, have lower incomes, and are either on Medicaid or have no insurance.<sup>3</sup> Studies in California also find that mothers who have more alcoholic drinks per week on average during pregnancy are more likely to smoke during pregnancy.<sup>4</sup> Recent data from California also show that about half of pregnant Californians who smoke during the first three months of pregnancy stop smoking by the last three months of pregnancy.<sup>5</sup>

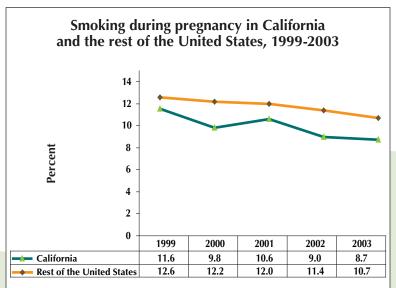
# Prevalence of smoking during pregnancy

- The prevalence of cigarette smoking among pregnant Californians was 8.7% in 2003.
- California has a lower smoking prevalence during pregnancy than the rest of the United States (excluding California). In 2003, smoking prevalence during pregnancy was 10.7% in the rest of the United States<sup>6</sup>, compared to 8.7% in California
- The smoking prevalence during pregnancy in California has declined by 25.0% in recent years, from 11.6% in 1999 to 8.7% in 2003. The percentage decrease over this time period is larger in California than in the rest of the United States, which declined by 15.1% from 12.6% in 1999 to 10.7% in 2003.<sup>7-10</sup>
- During the same period, smoking prevalence of California women of reproductive age (15-49 years)

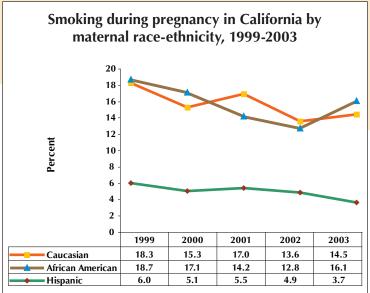
has declined from 15.5% in 1999 to 13.4% in 2003.<sup>11</sup> The absolute percent decrease (2.1%) is similar to the percentage observed for smoking during pregnancy (2.9%).

# Smoking during pregnancy by maternal race-ethnicity

- From 1999 to 2003, Caucasian and African-American women had a similar smoking prevalence during pregnancy, around 15.0%.
- From 1999 to 2003, Hispanic women had about one-third the smoking prevalence during pregnancy compared to Caucasian and African-American women. Smoking during pregnancy among Hispanic women has decreased by 38.3% from 6.0% in 1999 to 3.7% in 2003.
- Between 1999 2003, Caucasian and African-American women had a smaller decline in smoking prevalence during pregnancy when compared to Hispanic women.

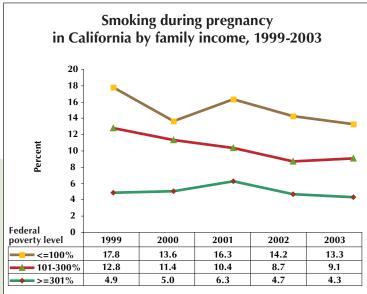


Source: Prevalence of smoking during pregnancy among Californians came from the California's Maternal and Infant Health Assessment Survey (MIHA), 1999-2003. Smoking during pregnancy is women's self-report smoking either in the first trimester or in the third trimester. The prevalence rates in the rest of the United States (excluding California) came from National Vital Statistics Reports based on birth Certificate data (Ventura SJ 2001, Martin JA 2002, 2003, 2004, 2004). Smoking during pregnancy refers to tobacco use during the entire course of pregnancy. Prepared by: California Department of Health Services, Tobacco Control Section, May 2006.



Source: Prevalence of smoking during pregnancy among Californians came from California's Maternal and Infant Health Assessment Survey (MIHA), 1999-2003.

Prepared by: California Department of Health Services, Tobacco Control Section, May 2006.



Source: Prevalence of smoking during pregnancy among Californians came from California's Maternal and Infant Health Assessment Survey (MIHA), 1999-2003.

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### Smoking during pregnancy by family income

- Women in higher-income families were three times less likely to smoke during pregnancy, compared to women in lower-income families.
- The high smoking prevalence during pregnancy among poor pregnant women decreased rapidly (25.3%) in recently years, from 17.8% in 1999 to 13.3% in 2003.
- Over the years 1999-2003, pregnant women with high family income in California consistently had a low prevalence of smoking during pregnancy.

#### **About the Survey**

Data are from the Maternal and Infant Health Assessment (MIHA), 1999-2003. The MIHA is a collaborative project between the California Department of Health Services, Maternal, Child and Adolescent Health/Office of Family Planning Branch and researchers at the Department of Family and Community Medicine at the University of California, San Francisco. MIHA is an annual statewide survey representative of women who recently gave birth in California. It is modeled on the Centers for Disease Control and Prevention's Pregnancy Risk Assessment Monitoring System (PRAMS). A stratified random sample of approximately 5,000 women who recently delivered a live birth are selected from birth certificate data. Self-administered surveys in English and Spanish are mailed to women 10 to 14 weeks postpartum, with telephone followup to nonrespondents. The average response rate of the MIHA is approximately 72%, for a total of about 3,500 respondents annually. Smoking during pregnancy is defined as any self-identified maternal smoking during the first or third trimesters of pregnancy. For more information about MIHA, please see http://www.mch.dhs.ca.gov/epidemiology.

### Acknowledgements

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#### References

- 1. Mathews TJ. Smoking during pregnancy in the 1990s. National Vital Statistics Reports. 2001 49: 1-16.
- 2. U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the

- Surgeon General—2004. Centers for Disease Control and Prevention, Office on Smoking and Health. Atlanta Georgia, May 2004.
- Melvin CL, Adams EK, and Ayadi MF. State estimates of neonatal health-care costs associated with maternal smoking – United States, 1996. MMWR 2004 53:915-917
- Godecker AL, Marchi KS, Takahashi ER, and Ahmad S. Maternal smoking and alcohol use during pregnancy in California, 1999-2004. Annual Meeting of the American Public Health Association. December 10-14, 2005, Philadelphia, PA.
- California Department of Health Services, Maternal, Child and Adolescent Health/Office of Family Planning Branch. Smoking during pregnancy, 2002 (fact sheet).
- Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, and Munson ML. Births: final data for 2003. National Vital Statistics Reports 2005 54(2):12.
- 7. Ventura SJ, Martin JA, Curtin SC, Menacker F, and Hamilton BE. Births: final data for 1999. National Vital Statistics Reports 2001 49(1):11.
- 8. Martin JA, Hamilton BE, Ventura SJ, Menacker F, and Park MM. Births: final data for 2000. National Vital Statistics Reports 2002 50(5):11
- 9. Martin JA, Hamilton BE, Ventura SJ, Menacker F, and Park MM. Births: final data for 2001. National Vital Statistics Reports 2002 51(2):13.
- Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, and Munson ML. Births: final data for 2002. National Vital Statistics Reports 2003 52(10):12.
- 11. California Department of Health Services, Tobacco Control Section. California Adult Tobacco Survey, 1999-2003 and Behavioral Risk Factor Surveillance System, 1999-2003

### SMOKING DURING PREGNANCY

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